Application No.: 10/088,811

Examiner: A. Bashore

AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows:

1. (Currently Amended) A method of manufacturing flexible magnetic tape having a

permanently structured magnetic characteristic which varies from place to place in two different

directions in the a plane of the tape, the method including:[[-]]

[[a)]] providing a flexible elongated substrate with a layer of material having a

permanently structured magnetic characteristic which varies in a first direction making an

oblique angle relative to the a longest dimension of the substrate[[,]];

[[b)]] coating the said substrate with a slurry comprising anisotropic magnetic particles;

[[c)]] moving the substrate and slurry coating relative to a first magnetic field having a

field strength which varies with time in a second direction making an oblique angle with the first

direction, thereby;

orienting, in response to moving the substrate, the said magnetic particles on selected

spaced areas of the substrate in a second direction making an oblique angle with the first

direction, whereby the magnetic particles oriented in the second direction are overlaid on top of

the permanently structured magnetic characteristic which varies in the first direction; and

[[d]]] solidifying the slurry to fix the said magnetic particles in place:[[.]]

wherein points on the tape are uniquely identifiable by a single linear movement of a read

head.

2. (Original) A method as claimed in claim 1 in which the layer of material having a

permanently structured magnetic characteristic is replaced by a layer of a metal having a

modulated thickness which varies in first direction making an oblique angle relative to the

longest dimension of the substrate, the thickness modulations being detectable by an active

magnetic read head.

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3. (Currently Amended) A method as claimed in claim 2 in which the layer of a metal is

deposited upon the solidified slurry layer that has been solidified, so that the thickness of the

solidified slurry layer is substantially constant.

4. (Original) A method as claimed in claim 1 in which the layer of material having a

permanently structured magnetic characteristic which varies in first direction making an oblique

angle relative to the longest dimension of the substrate comprises layer including magnetic

particles, the layer having a modulated thickness.

5. (Original) A method as claimed in claim 4 in which the layer of material having a

permanently structured magnetic characteristic and having a modulated thickness is deposited

upon the solidified slurry layer, so that the thickness of the solidified slurry layer that has been

solidified is substantially constant.

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6. (Currently Amended) A method of manufacturing flexible magnetic tape having a

permanently structured magnetic characteristic which varies from place to place in two different

directions in the a plane of the tape, the method including:[[-]]

a) coating a flexible substrate with a slurry comprising anisotropic magnetic particles;

b) moving the substrate and slurry coating relative to a first magnetic field having a field

strength which varies with time in a first direction, thereby:

c)orienting, in response to the moving, the said magnetic particles in a first direction,

whereby the particles oriented in the first direction produce a detectable pattern oriented

in the first direction;

[[c)]]d) subsequently moving the substrate and slurry coating relative to a second

magnetic field having a field strength which varies with time in a second direction making an

oblique angle with the first direction, thereby-;

e) orienting, in response to the subsequently moving, a subset of the said magnetic

particles on selected spaced areas of the substrate in a second direction making an oblique angle

with the first direction, whereby the subset of the particles oriented in the second direction

produce a detectable pattern in the second direction which is superimposed over the detectable

pattern oriented in the first direction;

[[d)]] f) solidifying the slurry to fix the said particles in place;

characterised characterized in that the first magnetic field has a magnetic field strength

which varies with time in said first direction, such that following step [[c]]e) the said magnetic

particles are selectively oriented in spaced areas in both said first and said further directions; and

wherein the first detectable pattern and the second detectable pattern are uniquely

identifiable by a single linear movement of a read head.

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7. (Previously Presented) A method as claimed in claim 6, in which the substrate

is subsequently slit along either said first or said second direction to provide a plurality of lengths

of tape having respective permanently structured magnetic patterns which vary in a single

direction in the plane of the tape.

Claims 8-9 (Cancelled)

10. (Previously Presented) A method as claimed in claim 1, in which the substrate

is subsequently slit along either said first or said second direction to provide a plurality of lengths

of tape having respective permanently structured magnetic patterns which vary in a single

direction in the plane of the tape.

Claims 11-12 (Cancelled)

13. (New) The method of claim 6, further comprising:

moving the substrate and slurry coating relative to a third magnetic field having a field

strength which varies with time in a direction that is one of

parallel to the first direction, and

oblique to the first direction and second direction; and

orienting a subset of the subset of magnetic particles oriented in the second direction on

selected spaced areas of the substrate in a direction that is one of

parallel to the first direction, and

oblique to the first direction and second direction.

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14. (New) A flexible magnetic tape having a permanently structured magnetic characteristic

which varies from place to place in two different directions in a plane of the tape, the flexible

magnetic tape comprising:

a flexible substrate comprising a solidified slurry including anisotropic magnetic

particles, wherein a first set of the magnetic particles are oriented by a first magnetic field in a

first direction, whereby the first set of particles oriented in the first direction produce a detectable

pattern oriented in the first direction, and wherein a second set of the magnetic particles are

oriented by a second magnetic field in a second direction making an oblique angle with the first

direction, whereby the second set of particles oriented in the second direction produce a

detectable pattern in the second direction which is superimposed over the detectable pattern

oriented in the first direction.